



US009680039B2

(12) **United States Patent**
Samuelson et al.

(10) **Patent No.:** **US 9,680,039 B2**
(45) **Date of Patent:** ***Jun. 13, 2017**

(54) **NANOSTRUCTURES AND METHODS FOR
MANUFACTURING THE SAME**

25/02; C30B 25/14; C30B 25/18; C30B
25/183; C30B 29/403; C30B 29/406;
C30B 29/605; C30B 29/0665; C30B
29/0673; C30B 29/068; C30B 29/20;
C30B 29/66318; C30B 29/7371; H01L
31/035227; H01L 29/0665; H01L
29/0673;

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-
claimer.

(56)

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(21) Appl. No.: **14/300,614**

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(22) Filed: **Jun. 10, 2014**

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(Continued)

(65) **Prior Publication Data**

US 2015/0027523 A1 Jan. 29, 2015

Related U.S. Application Data

(62) Division of application No. 12/003,740, filed on Dec.
31, 2007, now Pat. No. 8,772,626, which is a division
(Continued)

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(51) **Int. Cl.**
H01L 31/0352 (2006.01)
B82Y 10/00 (2011.01)
(Continued)

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(52) **U.S. Cl.**
CPC **H01L 31/035227** (2013.01); **B82Y 10/00**
(2013.01); **C30B 11/00** (2013.01);
(Continued)

(57) **ABSTRACT**

A resonant tunneling diode, and other one dimensional
electronic, photonic structures, and electromechanical
MEMS devices, are formed as a heterostructure in a nano-
whisker by forming length segments of the whisker with
different materials having different band gaps.

(58) **Field of Classification Search**
CPC C30B 11/00; C30B 11/12; C30B 5/00; C30B

5 Claims, 18 Drawing Sheets

